

WHAT IS CLAIMED IS:

1. An image forming apparatus for forming images on a recording medium comprising:

a charge-retentive surface to receive an electrostatic latent image thereon;

a development component to apply toner to said charge-retentive surface to develop said electrostatic latent image to form a developed toner image on said charge retentive surface;

a intermediate transfer member to transfer the developed toner image from said charge retentive surface to a copy substrate, wherein said intermediate transfer member comprises a substrate comprising a first binder and lignin sulfonic acid doped polyaniline dispersion; and

a fixing component to fuse said developed toner image to said copy substrate.

2. An image forming apparatus in accordance with claim 1, wherein said lignin sulfonic acid doped polyaniline is present in the substrate in an amount of from about 1 to about 50 percent by weight of total solids.

3. An image forming apparatus in accordance with claim 2, wherein said lignin sulfonic acid doped polyaniline is present in the substrate in an amount of from about 5 to about 20 percent by weight of total solids.

4. An image forming apparatus in accordance with claim 3, wherein said lignin sulfonic acid doped polyaniline is present in the substrate in an amount of from about 6 to about 10 percent by weight of total solids.

5. An image forming apparatus in accordance with claim 1, wherein said first binder is a polymer selected from the group consisting of polycarbonate, polyimide, polyvinyl chloride, polyether, polystyrene, polyacrylate, polyurethane, polyalkylene, polyphenylene sulfide, and mixtures thereof.

6. An image forming apparatus in accordance with claim 5, wherein said first binder is a polyimide.

7. An image forming apparatus in accordance with claim 5, wherein said first binder is a polycarbonate material selected from the group consisting of poly(4,4'-isopropylidene-diphenylene carbonate), poly(4,4-diphenyl-1,1'-cyclohexane carbonate), poly(4,4'-isopropylidene-3,3'-dimethyl-diphenyl carbonate), and mixtures thereof.

8. An image forming apparatus in accordance with claim 1, wherein said intermediate transfer belt has a surface resistivity of from about 10^2 to about 10^{15} ohm/sq.

9. An image forming apparatus in accordance with claim 8, wherein said intermediate transfer belt has a surface resistivity of from about 10^8 to about 10^{14} ohm/sq.

10. An image forming apparatus in accordance with claim 1, wherein said intermediate transfer belt is a seamless belt.

11. An image forming apparatus in accordance with claim 1, wherein said intermediate transfer belt is a seamed belt.

12. An image forming apparatus in accordance with claim 11, wherein said transfer belt comprises a first end and a second end, each of said first end and said second end comprising a plurality of mutually mating elements which join in an interlocking relationship to form a seam.

13. An image forming apparatus in accordance with claim 12, wherein said plurality of mutually mating elements are in the form of a puzzle cut pattern.

14. An image forming apparatus in accordance with claim 13, wherein said mutually mating elements comprise a first projection and a second receptacle geometrically oriented so that said second receptacle on the first end receives the first projection on the second end and wherein said first projection on said first end is received by said second receptacle on the second end to form a joint between the first and second ends.

15. An image forming apparatus in accordance with claim 11, wherein said seam comprises an adhesive.

16. An image forming apparatus in accordance with claim 15, wherein said adhesive comprises a second binder and lignin sulfonic acid doped polyaniline.

17. An image forming apparatus in accordance with claim 16, wherein said second binder is selected from the group consisting of copolyester, fluoropolymer, polyvinylbutyral, epoxy, polyimide, polyurethane, polyamide, nitrile phenolic, and mixtures thereof.

18. An image forming apparatus in accordance with claim 17, wherein said second binder is a polyamide.

19. A belt comprising a substrate comprising a first binder and a lignin sulfonic acid doped polyaniline dispersion.

20. An image forming apparatus for forming images on a recording medium comprising:

a charge-retentive surface to receive an electrostatic latent image thereon;

a development component to apply toner to said charge-retentive surface to develop said electrostatic latent image to form a developed toner image on said charge retentive surface;

an intermediate transfer belt to transfer the developed toner image from said charge retentive surface to a copy substrate, wherein said intermediate transfer belt comprises a substrate comprising a polyimide and a lignin sulfonic acid doped polyaniline dispersion; and

a fixing component to fuse said developed toner image to said copy substrate.